

- 19 -

ABSTRACT OF THE DISCLOSURE

A dual magnet Hall effect switch for contactless switching is provided. The Hall effect switch includes a magnet carriage and a Hall effect sensor positioned inside a switch housing. The magnet carriage includes two magnets positioned with opposite polarities facing the Hall effect sensor and in contact. When the switch is actuated, the magnet carriage is displaced within the switch housing and relative to the Hall effect sensor. The two magnets positioned inside the magnet carriage are also displaced. The positional displacement of the magnets relative to the Hall effect sensor alters the magnetic field detected by the Hall effect sensor. When the magnetic field detected by the Hall effect sensor reaches a predetermined level, the switch is actuated. The Hall effect switch also includes a boot seal sealing the switch and an internal clicker ball to provide an audible or tactile indication of the switch's actuation.